



# **ELECTRICAL CURRENTS**

Office of the Chief Electrical Inspector

Ron Fuller, Chief Electrical Inspector

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## ● **Stakeholders Work With The Department To Draft Agency Sponsored Legislation**

The electrical program is currently working closely with many electrical industry representatives in developing proposed Labor & Industries sponsored legislation for the 2002 session. Some of the provisions of the proposed legislation are:

- It establishes a “master journeyman or master specialty electrician” certification for those individuals that have administrator certification and four years of journeyman electrician certification or two years of specialty electrician certification. These individuals will only have one certificate to renew.
- It establishes the same continuing education requirements for master electricians and electrical administrators that exist today for journeyman and specialty electricians.
- The bill would allow up to one year of work experience credit for individuals that complete an approved community college or trade school training program in one of the electrical specialties. This creates an equitable situation for specialty electrician training programs that already exists for journeyman electrician training programs.
- The bill would allow the minimum work experience requirements for exam eligibility for electrical specialties (other than 02-residential, 03-pump and irrigation, 04-sign, 06-limited energy, or 07-nonresidential maintenance) to be developed in the rule-making (WAC) process, with the approval of the Electrical Board.

## ● **WAC Rule Revision Process: WAC 296-46A and 296-401B are open for proposals.**

WAC 296-46A and WAC 296-401B are open for review and revision with public comments and hearings to follow. These rules will remain open until mid-summer of 2002. The official adoption of the 2002 National Electrical Code is a part of this revision cycle. The projected effective date of this rule package is about July 2002.

Revisions must be dedicated to the safety of the electrical industry’s customers and the facilities they occupy, or to the safety, competency and accountability of electrical contractors and electrical workers. The rules are developed by the department in conjunction with our stakeholders in order to provide clarity and guidance in enforcement of the intent of the statute. All proposed revisions of the rules must have basis in chapter 19.28 RCW—Electricians and Electrical Installations.

Similar to the format for proposals to modify the National Electrical Code, any proposed rule revisions must include your suggested language. You must also include justification or technical substantiation for any proposed changes. Your formal comments and recommendations can be sent in writing to: **Ron Fuller, Chief Electrical Inspector; Department of Labor and Industries; Rule Revisions; PO Box 44460, Olympia, WA 98504-4460.** Proposals will be collected and evaluated until the closing date is announced in the spring of 2002. Please continue to check for the draft language and public hearing dates that will be scheduled for later this fall on the Electrical Program’s website at [www.wa.gov.lni/scs/electrical](http://www.wa.gov.lni/scs/electrical).

## ● **Digital Government Applications Academy—Electrician Renewal Project**

The Digital Government Applications Academy is a group of information services experts from various state and local agencies working in a cooperative effort to produce software that will utilize current computer technology to provide improved customer services. The Electrical Section has been selected for a pilot project called “Electrician Renewal”. The department is working in conjunction with this Department of Information Services (DIS) led group to develop an on-line licensing and certification renewal system. Within the next year, electricians will be able to apply for renewal of their certificate of competency on the Internet. You will enter your renewal application and completed (Washington

approved) continuing education course information on-line, and you will be able to pay the renewal fees on-line. We anticipate this service will be available early in the year 2002.

As our customers have requested, the Electrical Program is continuing work to provide the convenience of today's digital electronic technology services for the electrical industry. Chief Electrical Inspector, Ron Fuller stated, *"This is a huge, huge thing for us. The Academy course gives us a big jumpstart on the project. The timing is perfect, and our project team can take advantage of expertise that is not available internally. The electricians e-license renewal is an ideal candidate for the Academy's design-build project—big impact, cost-efficient and it has a tremendous potential for use in other programs."*

### ● **When can a fourth-year electrical trainee work unsupervised?**

There is an industry-wide misconception about when it is permissible for a fourth-year trainee to work without supervision. This status is not automatic. WAC 296-401B-340 establishes a **six-month, nonrenewable** fourth-year electrical training certificate that will allow a fourth-year trainee to work unsupervised, providing all the following conditions are met:

- The trainee must make application for the "unsupervised electrical training certificate".
- The trainee must have accumulated over 7000 hours experience while properly supervised.
- The trainee must have successfully completed or be currently enrolled in an approved electrical apprenticeship program or an electrical construction trade program in a school approved by the board of community and technical colleges.
- The trainee must pay all the appropriate fees necessary to take the journeyman electricians exam as found in WAC 296-401B-700.
- The trainee must be working for and continue to work for a licensed electrical contractor that employs at least one certified journeyman or specialty electrician in the appropriate specialty.
- The unsupervised trainee may not supervise other trainees.

This special training certificate is **valid for one six-month period only** and is identified with large block letters across the face saying, "UNSUPERVISED". If trainee fails to pass the exam during this period, then the requirement that they be supervised on a job site is no different than for any other trainee.

### ● **Meter Base Ratings For Dedicated Pump Service Equipment**

It is not uncommon for dedicated pump service equipment to be "oversized" relative to the calculated service load in order to accept overcurrent devices that allow the motor and branch-circuit overload protection, motor branch-circuit short-circuit and ground-fault protection, and motor feeder short-circuit and ground-fault protection as permitted by NEC Article 430. Metering equipment for these services needs to be rated of adequate capacity to supply the service "calculated load" according to NEC Article 220. It does not have to match the rating of the "oversized" equipment downstream. Serving utilities should always be consulted regarding metering requirements.

### ● **Residential Septic Systems and the 03-Pump and Irrigation Specialty**

Although the language in WAC 296-46A-930(b)(i) does not specifically include these systems, the Chief Electrical Inspector has determined that the **unclassified residential** septic pumping systems described in WAC 296-46A-500 are within the scope-of-work of the 03-Pump and Irrigation electrical specialty. These systems are not included in the scope-of-work for the 03A-Domestic Well specialty.

### ● **Code Question of the Month**

**This month's Code Question:** Which of the following can be utilized for the bonding of service equipment? A) Green screw, B) Wire, C) Bus, D) All of the above

**Last month's Code Question:** What is the MAXIMUM combined load of two (2) 240-volt fixed-space heaters on a 30-amp branch circuit? **The answer is: (2) 5,760va. [NEC 424-3(b)]**